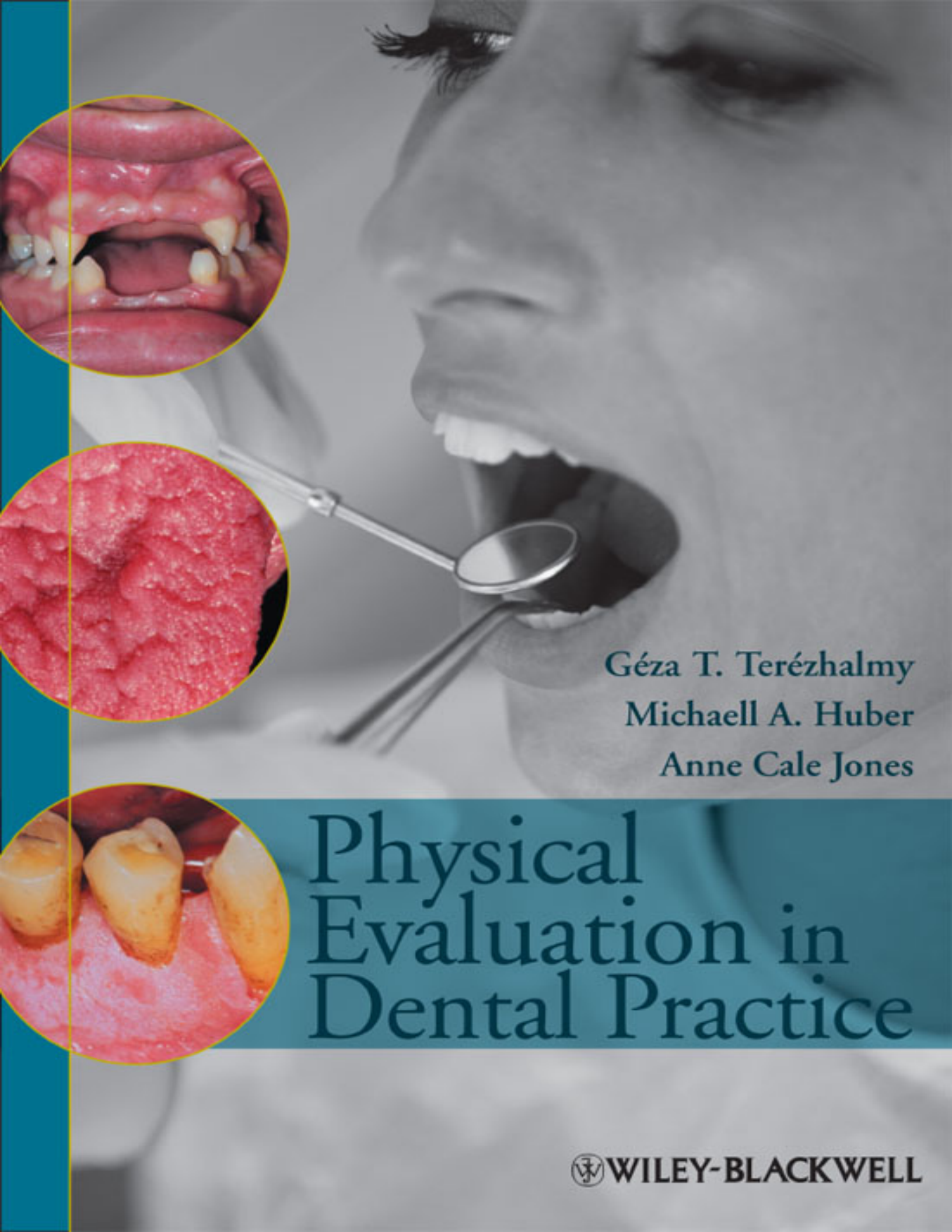

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Anne Cale Jones

Physical Evaluation in Dental Practice

WILEY-BLACKWELL

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with contributions by Vidya Sankar and Marcel E. Noujeim

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Preface

> Learn to see, learn to hear, learn to feel, learn to smell, and know that by practice alone can you become an expert.
>
> Sir William Osler

Diagnosis is the bridge between the study of disease and the treatment of illness. Making a distinction between disease and illness appears redundant because the words frequently are used interchangeably. However, diseases of the oral cavity and related structures may have profound physical and emotional effects on a patient, and a holistic approach to patient care makes this distinction significant. In oral pathology one studies disease; in clinical dentistry one treats illness. For example, necrotizing ulcerative gingivitis may be defined with special emphasis on the microbiological aspects of the disease, or one may speak of an inflammatory reaction featuring “punched-out” erosions of the interdental papillae. However, necrotizing ulcerative gingivitis is more complex. It is the totality of symptoms (subjective feelings) and signs (objective findings) that together characterize a single patient’s reaction—not merely a tissue response—to infection by spirochetes. While disease is an abstraction, illness is a process.

Similarly, clinicians must recognize that systemic disease may affect the oral health of patients and to treat dental disease as an entity in itself is to practice a rigid pseudoscience that is more comforting to the clinician than to the patient. The diagnosis and treatment of advanced carious lesions afford little support to the patient if one overlooks obvious physical findings suggesting that the extensive restorative needs were precipitated by qualitative and quantitative changes in the flow of saliva secondary to

an undiagnosed or uncontrolled systemic problem, or anticholinergic pharmacotherapy. The clinician with a balanced view of dentistry will recognize that caries is only a sign of disease and preventive and therapeutic strategies will have to be based on many patient-specific factors.

It is axiomatic that while dentists are the recognized experts on oral health, they must also learn of systemic diseases. Such an obligation is tempered only by the extent to which systemic diseases relate to the dental profession's anatomic field of responsibility, the extent to which illnesses require modification of dental therapy or alter prognoses, and the extent to which the presence of certain conditions (infectious diseases) may affect caregivers. Consequently, clinicians should not treat oral diseases as isolated entities. They should recall that physical signs and symptoms are produced by physical causes. Since physical problems are the determinants of physical signs and symptoms, these signs and symptoms must be recognized before the physical problems can be diagnosed and treated.

It is through the clinical process that clinical judgment is applied and, with experience, matures. Clinical judgment does not come early or easily to most clinicians. It is forged from long hours of clinical experience and a life-long commitment to the disciplined study of diseases and illnesses. Clinicians should study books to understand disease, study patients to learn of human nature and illness, and model mentors to develop clinical judgment. Ultimately, the experienced clinician will merge the science of understanding disease and the art of managing illness. These activities should be fostered by the clinician's sincere desire to minimize patient discomfort, both physical and emotional, and to maximize the opportunities to provide optimal care.

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Introduction to the Clinical Process

Patients consult clinicians to obtain relief from symptoms and to return to full health. When cure is not possible, intervention to improve the quality of life is warranted. Consequently, oral healthcare providers' primary obligation is the timely delivery of quality care within the bounds of the clinical circumstances presented by patients. The provision of quality care will depend on timely execution of the clinical process.

Essential Elements of the Clinical Process

The clinical process represents a continuous interplay between science and art and may be conveniently divided into three phases.

Phase I

Phase I of the clinical process is physical evaluation and consists of eliciting a historical profile, performing an examination, obtaining appropriate radiographs, ordering laboratory tests, and, when indicated, initiating consultations with or referrals to other healthcare providers. The information obtained is systematically recorded. In order to optimize the yield, clinicians need to possess an inquiring mind, discipline, sensitivity, perseverance, and patience.

Phase II

Phase II of the clinical process involves an analysis of all data obtained during Phase I. Interpretation and correlation of these data, in the light of principles gained from the basic biomedical and clinical sciences, will create the diagnostic fabric that will lead to a coherent, defendable, relevant, and timely diagnosis. This is an intellectual and, at times, intuitive activity. In making diagnoses, clinicians must recall their knowledge of disease.

Phase III

Phase III of the clinical process is centered around the timely development and implementation of necessary preventive and therapeutic strategies and communicating these strategies to the patient or guardian in order to obtain consent and to encourage compliance with and participation in the execution of the plan. In deciding on management strategies, clinicians must think in terms of illness and the total impact of a disease on a given patient and his or her immediate family.

Quality Management in the Clinical Process

A four-part control cycle (plan-do-check-act) introduced to industry in the 1930s is applicable to total quality management (TQM) in the clinical process and is reflected in the acronym CEAR (pronounced CARE): criteria-execution-assessment-response. Criteria are intended to maintain established standards. Ideally, standards should be based on knowledge derived from well-conducted trials or extensive, controlled observations. In the absence of such

data, they should reflect the best-informed, most authoritative opinion available. Execution is the implementation of activities intended to meet stated standards. Assessment is comparing the impact of execution (outcome) against the stated standards. Response refers to the activities intended to reconcile differences between stated standards and observed outcome (Table 1.1).

TQM provides the fabric for a disciplined approach to work design, work practices, and constant reassessment of the clinical process. In TQM there is no minimum standard of "good enough"; there is only "better and better." Defects are signals that point to parts of a process that must be improved so that quality is the result.

Table 1.1. Activities intended to correct a problem identified by the control cycle.

Reconsider the criteria (standard).
Redesign the activities intended to achieve the criteria
Review the assessment process.
Remediate without changing the criteria or the activities intended to achieve the criteria.
Reject the samples that do not meet the criteria.
Apply residual learning to the next control cycle.

Factors Affecting Quality

Amenities of Care

The amenities of care represent the desirable attributes of the setting within which the clinical process is implemented. They include convenience (access, availability of service), comfort, safety, and privacy. In private practice these are the responsibilities of the clinician. In institutional settings, the responsibility lies with the administrators of the institution.

Performance of the Clinician

The clinical process is a combination of intellectual and manipulative activities by which disease is identified and illness is treated. As we seek to define its quality, we must consider the performance of clinicians. There are two elements in the performance of clinicians that affect quality, one technical and the other interpersonal.

Technical performance depends on the knowledge and judgment used in arriving at appropriate diagnostic, therapeutic, and preventive strategies and on the skillful execution of those strategies. The quality of technical performance is judged in comparison with the best in practice. The best in practice, in turn, has earned that distinction because it is known or is believed to lead to the best outcome. The second element in the performance of the clinician that affects quality is interpersonal skills (see “Patient-Doctor Communication in the Clinical Process”).

Performance of the Patient

In considering variables that affect the quality of the clinical process, contributions made by the patient, as well as by family members, must also be factored into the equation. In those situations in which the outcome of the clinical process is found to be inferior because of lack of optimal participation by the patient, the practitioner must be judged blameless.

Assessing Quality

Effective control over quality can best be achieved by designing and executing a clinical process that meets professional standards and also acknowledges patients’ expectations. The information from which inferences can be drawn about quality may be classified under three headings: structure, process, and outcome.

Structure

In addition to the amenities of care discussed earlier, structure also denotes the attributes of material resources (e.g., facilities and equipment), human resources (e.g., the number and qualification of personnel), and organizational resources (e.g., convenience [access, availability of service], comfort, safety, privacy, methods of payment). Since structure affects the amenities of the oral healthcare setting, it can be inferred that good structure increases the likelihood of a good process.

Process

Process denotes what is actually done in the clinical process. It includes the clinician's activities in developing and recommending diagnostic, therapeutic, and preventive strategies; and the execution of those strategies, both by the clinician and the patient. Process also includes the values and virtues that the interpersonal patient-doctor relationship is expected to have (i.e., confidentiality, informed consent, empathy, congruence, honesty, tact, and sensitivity). In general, it can be assumed that a good process increases the likelihood of good outcome.

Outcome

Outcome denotes the effects of the clinical process on the identification and treatment of consequential problems, improvement in health, and changes in behavior. Because many factors influence outcome, it is not possible to determine the extent to which an observed outcome is attributable to an antecedent structure or process. However, outcome assessment does provide a mechanism to monitor performance to determine whether it continues to remain within acceptable bounds.

Patient-Doctor Communication in the Clinical Process

Poor skills in communicating with patients are associated with lower levels of patient satisfaction, higher rates of complaints, an increased risk of malpractice claims, and poorer health outcomes. Clearly, in the clinical process, the performance of clinicians as it relates to interpersonal skills is the very source of their vulnerability. The process of establishing a patient-doctor relationship, however, is not easy. To illustrate this point, let us consider the clinical process in dealing with a patient in pain, the most common complaint causing a person to seek the services of an oral healthcare provider.

Ideally, the clinician should initiate the clinical process in a quiet, comfortable, private setting and foster a warm, friendly, concerned, and supportive approach with the patient. However, this may be a challenging task since it is well established that many patients experience anticipatory stress in the oral healthcare setting. Such stress may provoke patients to experience a state of disequilibrium or crisis characterized by anxiety, that is, an intense unpleasant subjective feeling and an inability to function normally. The sequence of events, which leads from equilibrium to a crisis situation (disequilibrium) and back to equilibrium, includes a hazardous event, a vulnerable state, a precipitating factor, an active crisis state, and a reintegration state.

Hazardous Event

A hazardous event is any stressful life event that taxes the patient's ability to cope. The experience can be either internal (the psychological stress of dental phobia) or external (such as a natural disaster, the death of a loved one, or the loss of employment). Clinicians may be unaware of such hazardous events and patients may not readily volunteer such information.

Vulnerable State

Depending on subjective interpretation, one person may see the hazardous event as a challenge, while another may see the same event as a threat. If one views the event as a threat, the increased physical and emotional tension may manifest itself as perceptions of helplessness, anxiety, anger, and depression.

Precipitating Factor

The precipitating factor (in our example, pain) is the actual event that moves the patient from the vulnerable state to the active crisis state. This event, especially when added onto other stressful life events (hazardous events), can cause a person to suffer a crisis. In susceptible patients, not only pain but even minor dental problems requiring a visit to the dentist can precipitate an active crisis state.

Active Crisis State

During the active crisis state, the patient is emotionally and psychologically aroused because of pain, negative self-critical thoughts about what brought him or her into the clinician's domain, unfamiliarity with the environment, and fear that the clinician will be judgmental or punitive. The model for crisis intervention has six characteristic phases and follows the acronym CRISIS: calm confidence,

responsiveness, involvement, supportiveness, “I can” statements, and situation.

Calm Confidence

People who are in a crisis situation generally are not attuned to the words being spoken to them, but they are responsive to nonverbal communication. Behaviorally, calm confidence is displayed by establishing eye contact with the patient, by guiding the patient into the chair, or by touching the patient’s shoulders. All of these measures reflect inner self-confidence and control over the situation. If the clinician is perceived as being calm and confident, the patient is more likely to calm down and give trust and control to the clinician.

Responsiveness

Responsiveness is conveyed through verbal communication. It requires a willingness to be directive and to give firm guidance while responding to both the emotional and oral healthcare needs of the patient. The clinician with empathy for the patient does not convey a negative value judgment and, therefore, builds rapport with the patient.

Involvement

A patient in crisis will exhibit behaviors suggesting helplessness or dependency, which might make the clinician feel all the more responsible. Clinicians must relinquish this sense of total responsibility and assist the patient to assume responsibility for his or her own health. The clinician can redirect responsibility by telling patients that their active involvement is needed for a successful long-term outcome. Positive encouragement increases the likelihood that patients will adopt the behaviors necessary to maintain their oral health.

Supportiveness

Listening to the patient relating his or her feelings, concerns, and experiences is a large part of being supportive. Expressing acceptance in a nonjudgmental style, such as sitting near the patient at eye level and nodding in an understanding manner, further conveys support. This does not imply that the clinician must agree with the ideas of the patient, but it does reflect a sense of support and concern for the patient.

“I Can” Statements

Individuals often aggravate a crisis situation by expressing negative thoughts such as “I can’t handle this,” “This is too much for me,” or “I know this is going to be terrible.” Here, the clinician’s response may go a long way in determining a patient’s success in developing coping skills. By saying nothing, the clinician tacitly agrees with and reinforces an unhealthy line of thinking. On the other hand, by teaching the patient to use positive self-statements, the clinician helps foster healthy coping skills. Examples of positive coping thoughts include “One step at a time,” “I can handle this situation,” or “I can handle this challenge.” By positively confronting a crisis situation, the patient experiences less distress and is more responsive to intervention.

Situation

The situation is the crisis of the moment, and it reflects the physical and emotional state of the patient at that moment in time. It must be kept in mind that patients do not consult clinicians to obtain diagnoses, but to obtain relief from symptoms and to return to full health. When a cure is not possible, intervention to improve the quality of life is warranted. Successful resolution of the problem is often directly dependent on timely intervention. The situational

component of the crisis mandates that the intervention produce both short-term and long-term results (Table 1.2).

Table 1.2. Primary goals of crisis intervention in the oral healthcare setting.

Identify the problem.
Establish a working diagnosis.
Restore function (at least temporarily).
Develop a plan for definitive treatment.
Help the patient to connect the current crisis with past ineffective behaviors.
Teach the patient new preventive healthcare skills.

Reintegration State

Reintegration refers to the transition back to equilibrium. Ideally, the patient feels that the clinician was responsive. The problem has been resolved in a timely fashion, function has been restored (at least temporarily), a plan for definitive treatment has been agreed upon, the current crisis has been successfully connected with past ineffective behaviors, and new preventive healthcare skills have been instituted.

Characteristics of the Patient-Doctor Relationship

Reflecting on the case of the patient in pain discussed above, it becomes clear that the characteristics that distinguish, promote, and maintain a healthy patient-doctor relationship are empathy, congruence, positive regard, and, as we shall see later, “due process.”

Empathy

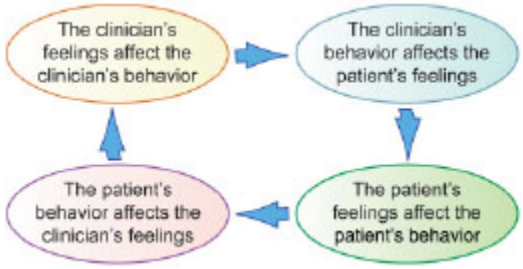
Empathy refers to the clinician’s perception and awareness of the patient’s feelings without participating in them. When the patient is sad, the clinician senses and acknowledges

the sadness, but does not become sad. In contradistinction, sympathy implies assumption of, or participation in, another person’s feelings.

Congruence

Congruence relates to the matter of words and deeds conveying the same message. Patients will sense whether the clinician’s words and deeds are congruent or convey divergent meanings. Similarly, if the patient says, “I am happy,” but appears sad and dejected, the clinician should be alert to the discordant messages conveyed by what is heard and what is observed.

Figure 1.1. Clinician-patient interaction.



Positive Regard

Positive regard is the act of recognition and active demonstration to the patient that the clinician recognizes the patient as a worthy person. This means that the clinician makes a concentrated effort to get to know what the patient cares about; what makes the patient happy, sad, or angry; what makes the patient likable or unlikable; and identifies qualities that make the patient unique. In this process, the clinician transmits attitudes to the patient by the same unconscious word inflections, tones of voice, and body language by which the patient conveys underlying feelings to the clinician. The human qualities that the clinician and patient bring to the process of the patient-doctor interaction

are crucial in either opening or closing the lines of communication (Figure 1.1).

Documentation of the Clinical Process

Attorneys, courts, and juries operate by the dictum “if it isn’t written down, it didn’t happen.” Documentation of the clinical process should conform to state laws governing the practice of dentistry and the standards of care established by the American Dental Association and other relevant professional organizations.

Table 1.3. Essential elements of a progress note.

Database	Subjective data	The reason for the visit, a statement of the problem (chief complaint), and a qualitative and quantitative description of the symptoms as described by the patient.
	Objective data	“Measurements” (a record of actual clinical, radiographic, and laboratory findings) taken by the clinician undistorted by bias.
Problem list	Assessment	Derived from the database, which leads to a provisional or definitive diagnosis, i.e., “needs” (existing conditions or pathoses).
Disposition	Plan	Proposed treatment plan and actual services (preventive, therapeutic) rendered to alleviate or resolve problems: include plans for consultation or referral to other healthcare providers, prescriptions written, and pre- and postoperative instructions.

Problem-Oriented Dental Record

Problem-oriented record keeping enjoys a significant degree of universality in both medical and dental settings. While there are many acceptable alternatives, the problem-

oriented dental record facilitates the standardized sequencing of activities associated with the elicitation and documentation of demographic, diagnostic, preventive and treatment planning, and treatment-related information.

Progress Notes

Logically structured progress notes provide the fabric to effectively document and promote continuing problem-oriented patient care. They facilitate the chronological recording of all patient encounters and are divided into three main components: the database (subjective and objective data), the problem list, and the disposition of the problem (Table 1.3).

Table 1.4. The database.

Patient identification
Demographic data
A statement of the problem
Chief complaint
Qualitative and quantitative description of the symptoms provided by the patient
Other reasons for the visit
New patient
Established patient
Recall
Emergency
Follow-up
Historical profile
Dental history
Medical history
Family history
Social history
Review of organ systems
Physical examination
Vital signs, height, and weight

Head and neck examination
Examination of the oral cavity
Radiographic studies
Laboratory studies
Consultations
Dental
Medical
Risk stratification

Database

The database is the product of those activities that are performed during Phase I of the clinical process (Table 1.4). These activities are effective to screen for significant disease, and the results are likely to be good reference points in the evaluation of future problems. Consequently, screening measures should be validated and focused on identifying those problems that one cannot afford to miss.

An initial database is to be recorded on all new patients (Tables 1.5 and 1.6). The documentation is to be made legibly and in ink. The use of symbols such as check marks and underlined or circled answers are best avoided. Responses to queries are to be recorded as “positive” (with appropriate elaboration), “negative,” or “not applicable.” The database is to be reviewed at all subsequent appointments and changes recorded in the progress notes of that day (Table 1.7).

Table 1.5. Documentation of initial historical profile.

NAME _____ ID NUMBER _____
Date of birth _____ Sex _____
Ethnic origin _____ Occupation _____
Address _____ City _____
State/Zip _____ Phone _____
Emergency contact Name _____ Phone _____
Name _____ Phone _____
Insurance information _____

CHIEF COMPLAINT

_____
_____

DENTAL HISTORY
Frequency of visits to dentist?

_____
Date of most recent radiographic examination?

_____
Types of care received?

_____
History of oro-facial injury (date, cause, type of injury)?

_____
Difficulties with past treatment?

_____
Adverse reactions (local anesthetics, latex products, and dental materials)?

_____

MEDICAL HISTORY
Drug allergies or other adverse drug effects?

_____
_____
_____
Medications (prescribed, OTC, vitamins, dietary supplements, special diets)?

_____
_____
_____
Past and present illnesses?

_____
_____
_____
_____
Last time examined by a physician (why)?

_____
_____
_____
_____
Females only (contraceptives, pregnancy, changes in menstrual pattern)?

_____
_____
_____